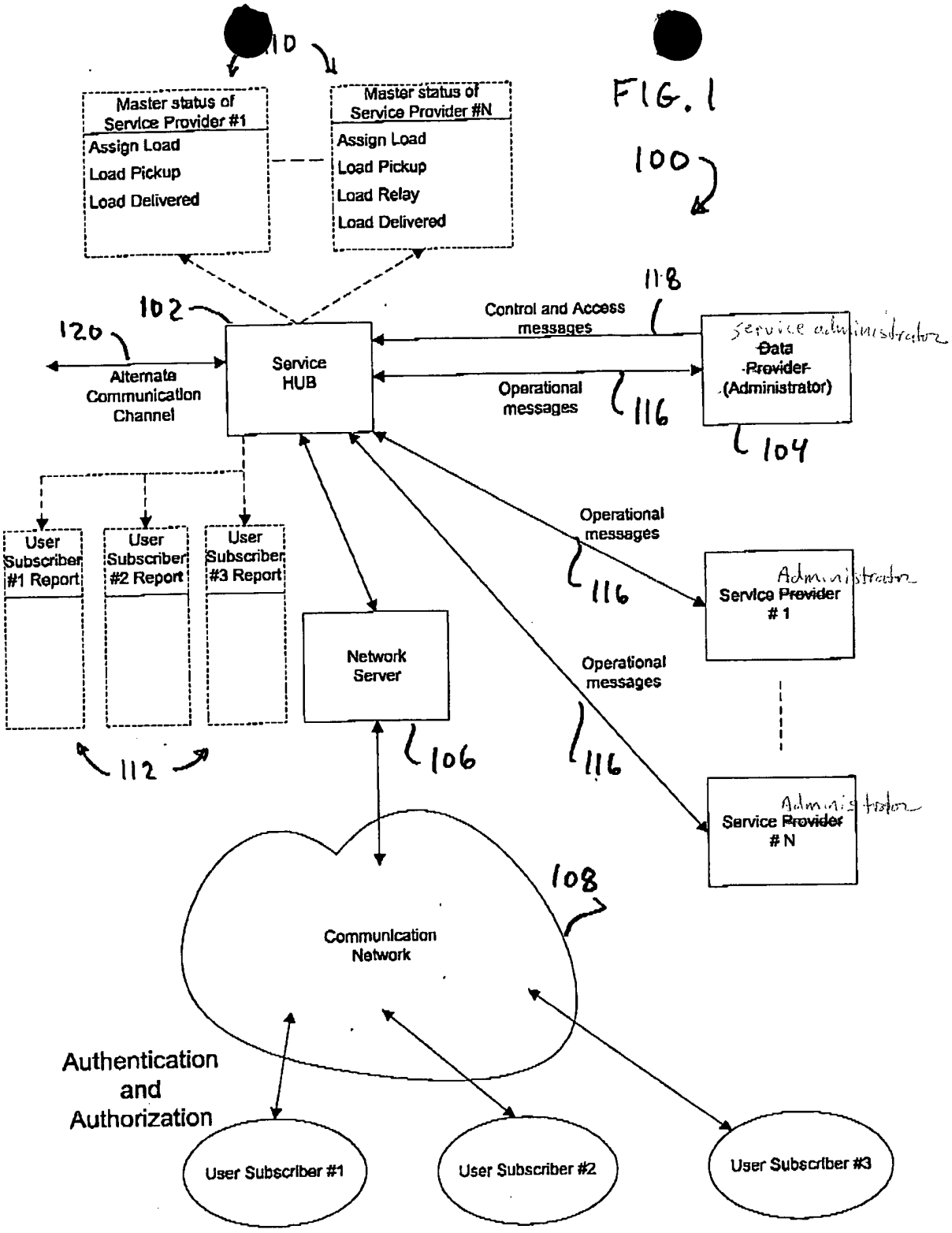

110
Master status of Service Provider #1
Assign Load
Load Pickup
Load Delivered
Master status of Service Provider #N
Assign Load
Load Pickup
Load Relay
Load Delivered
100
102
118
120
Control and Access messages
Service HUB
Alternate Communication Channel
Operational messages
116
Service administrator
Data Provider (Administrator)
104
User Subscriber #1 Report
User Subscriber #2 Report
User Subscriber #3 Report
Operational messages
116
Administrator
Service Provider # 1
Network Server
Operational messages
116
Service Provider # N
112
106
108
Communication Network
Authentication and Authorization
User Subscriber #1
User Subscriber #2
User Subscriber #3

FIG. 1

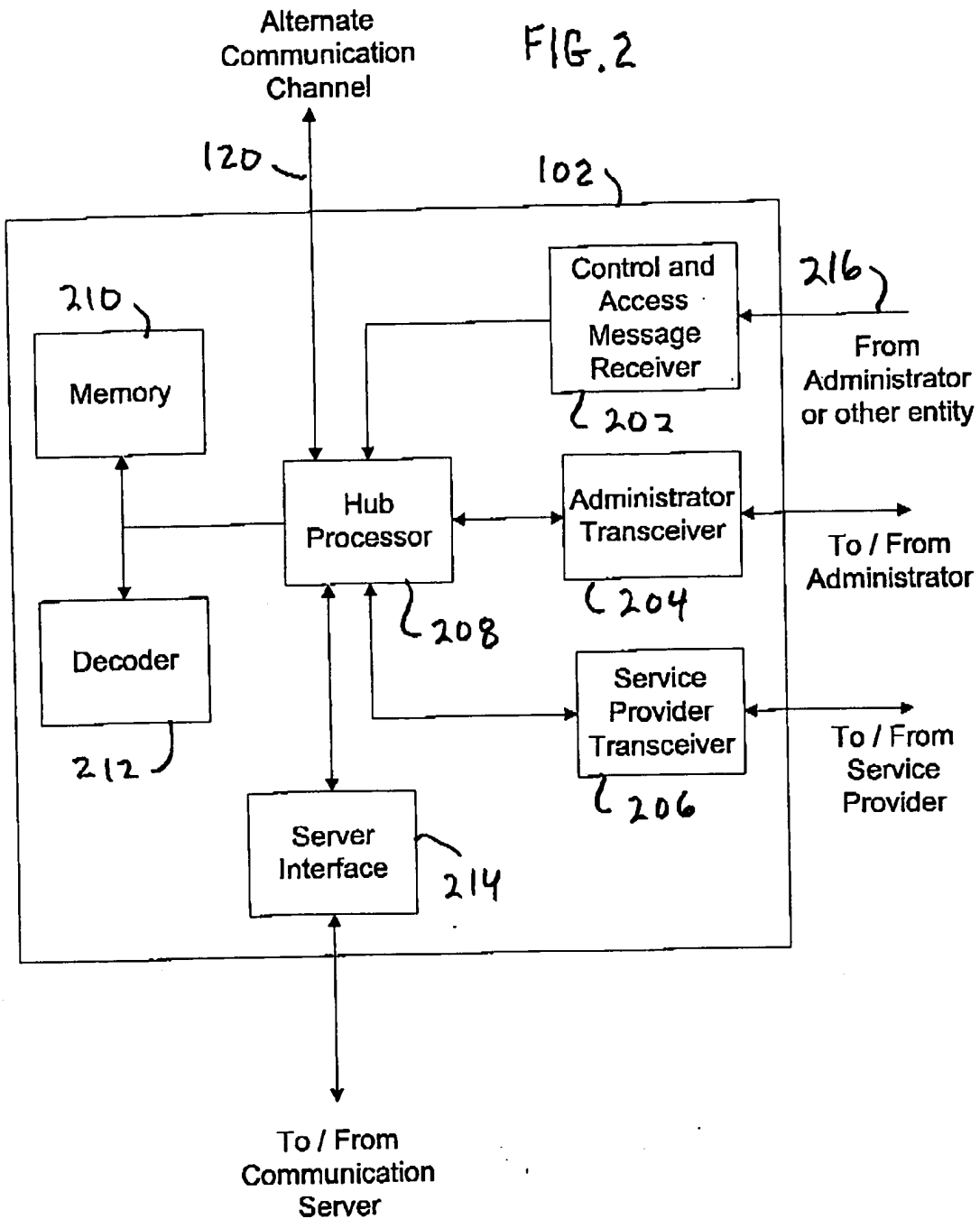

Alternate Communication Channel
120
102
Control and Access Message Receiver
216
From Administrator or other entity
202
210
Memory
Hub Processor
Administrator Transceiver
To / From Administrator
204
208
Decoder
212
Service Provider Transceiver
To / From Service Provider
206
Server Interface
214
To / From Communication Server

FIG. 2

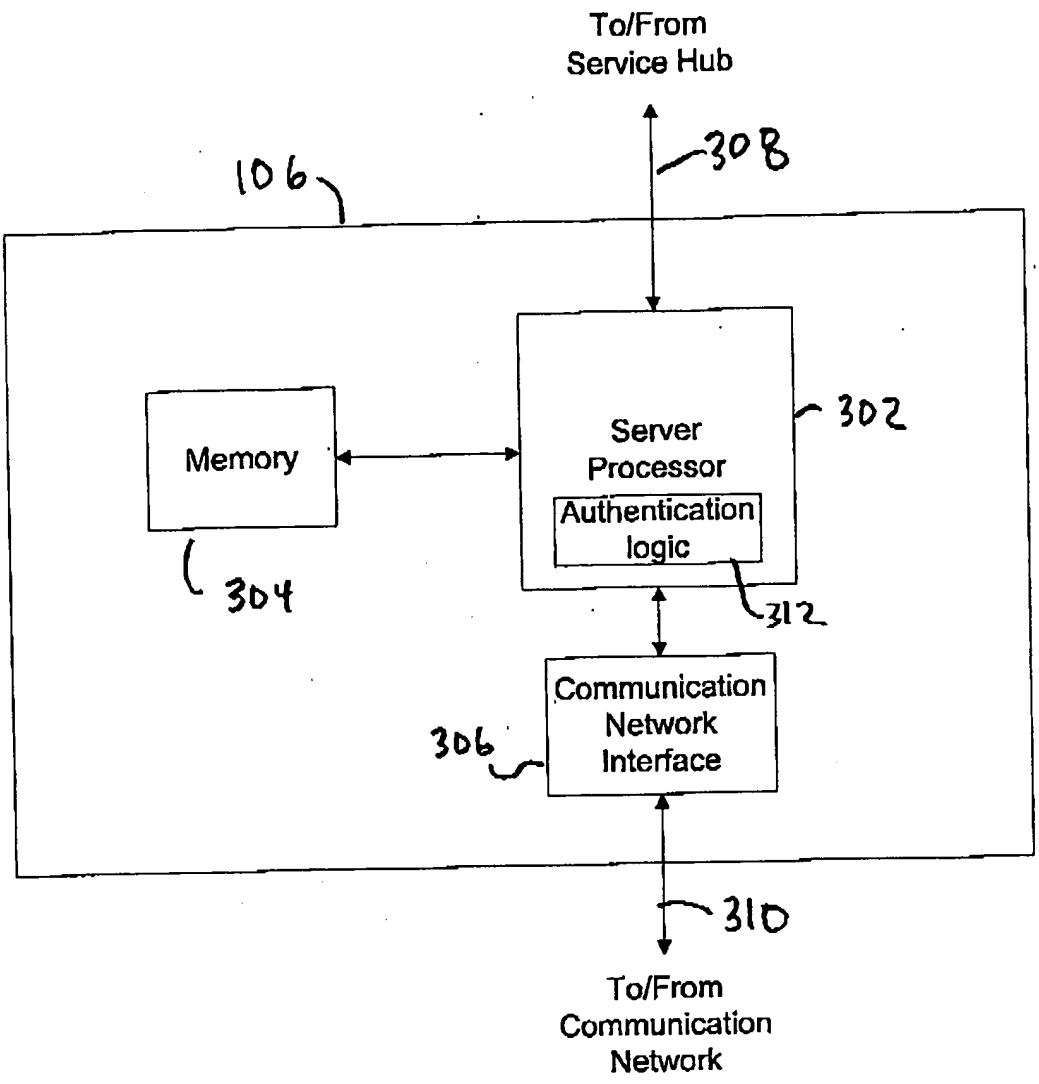

To/From
Service Hub
308
106
Memory
304
Server
Processor
302
Authentication
logic
312
Communication
Network
Interface
306
310
To/From
Communication
Network

FIG. 3

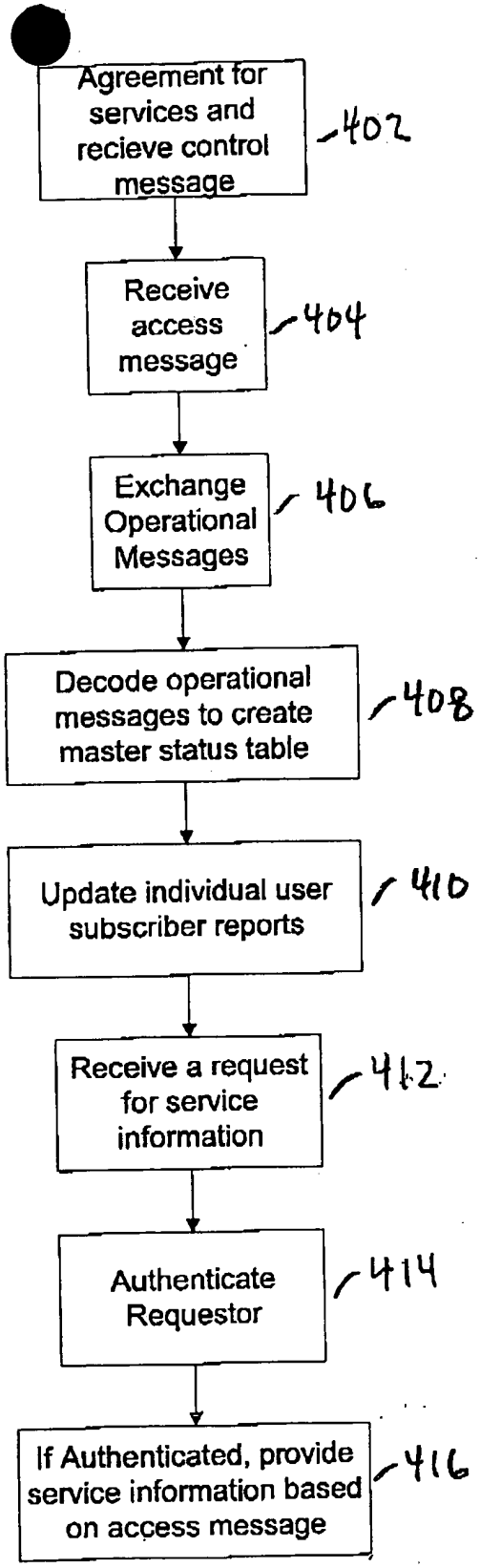

Agreement for services and recieve control message
402
Receive access message
404
Exchange Operational Messages
406
Decode operational messages to create master status table
408
Update individual user subscriber reports
410
Receive a request for service information
412
Authenticate Requestor
414
If Authenticated, provide service information based on access message
416

FIG. 4

400

Parameter	Control Message Content
0	Start of Control Message (502)
1	Adminstrator Identifier (504)
2	Service Type Identifier (506)
3	Service Provider Identifier (508)
4	Macro Code (001)
5	Macro Code (003)
6	Macro Code (004)
7	N/A (510)
8	Macro Code (002)
9	Macro Code (005)
⋮	⋮
X	End of Control Message (512)

500

FIG. 5

Parameter	Access Message Content
0	Start of Access Message (602)
1	Adminstrator Identifier (604)
2	Service Type Identifier (606)
3	User Subscriber Identifier (608)
4	Macro Code (610)
5	Macro Code (610)
6	Macro Code (610)
7	User Subscriber Identifier (612)
8	Macro Code (614)
9	Macro Code (614)
⋮	⋮
X	End of Access Message (616)

600

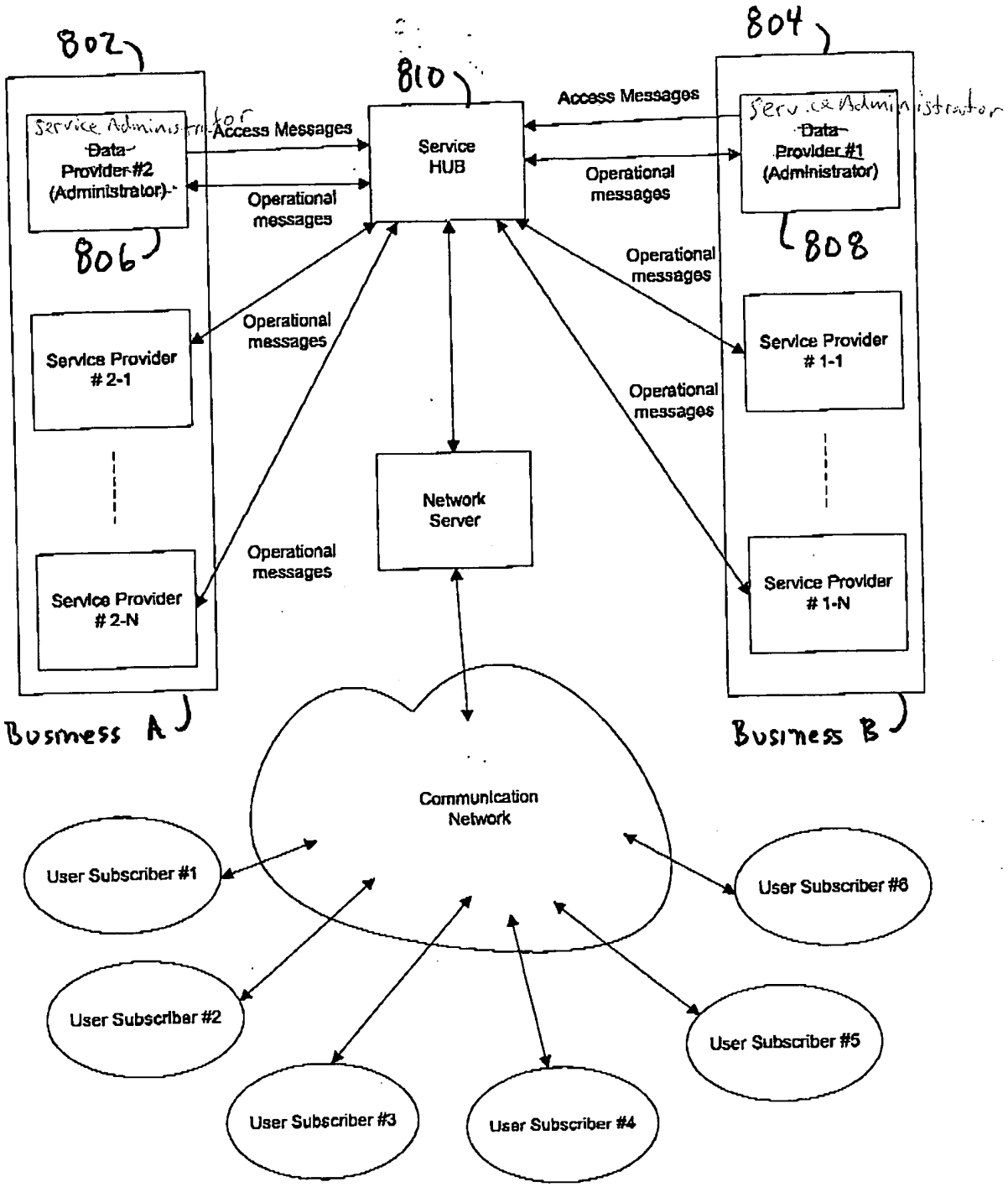
4

FIG. 6

Parameter	Operational Message Content	
0	Start of Operational Message (702)	700
1	Adminstrator Identifier (704)	
2	Service Type Identifier (706)	
3	Service Provider Identifier (708)	
4	Macro Code (710)	
5	Macro Code (710)	
6	Subscriber Identifier (712)	
7	Subscriber Identifier (712)	
⋮	⋮	
X	End of Operational Message (714)	

FIG. 7

FIG. 8


802
804
810
Service Administrator
Data Provider #2 (Administrator)
Access Messages
Operational messages
Service HUB
Access Messages
Operational messages
Service Administrator
Data Provider #1 (Administrator)
806
808
Operational messages
Operational messages
Service Provider # 2-1
Service Provider # 1-1
Network Server
Operational messages
Operational messages
Service Provider # 2-N
Service Provider # 1-N
Business A
Business B
Communication Network
User Subscriber #1
User Subscriber #6
User Subscriber #2
User Subscriber #5
User Subscriber #3
User Subscriber #4